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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/045,054	01/15/2002	Etienne Georges Maze	003744-02	2937

7590 08/10/2005
Brenda L. Havel
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EXAMINER

LAVILLA, MICHAEL E

ART UNIT PAPER NUMBER

1775

DATE MAILED: 08/10/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/045,054

Applicant(s)

MAZE ET AL.

Examiner

Michael La Villa

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 July 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 72-91 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 72-91 is/are rejected.
- 7) ☒ Claim(s) 72-91 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 22 July 2005 has been entered.

Claim Objections

2. Claims 72-91 are objected to because of the following informalities: Independent Claims 72, 80, and 85 should be presented with the correct, new claim numbering. Dependent claims 73-79, 81-84, and 86-91 should be presented with the correct, new claim numbering and, in specifying the claim dependency, should refer to previous claims in view of the correct, new claim numbering. Appropriate correction is required.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:
4. The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.
5. Claims 80, 83, and 84 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to

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reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Applicant's Specification at page 9, line 11 and page 11, paragraph 1 teaches that silane must be present. Hence, it is unclear how one of ordinary skill in the art would consider the Specification to teach that applicant had invented the claimed method, with its various claimed requirements, that includes application of a liquid formulation that lacks silane. In the absence of persuasive explanation for how the Specification conveys that applicant was in possession of the subject matter of these claims at the time of filing, rejection is appropriate.

6. Claims 80, 83, and 84 are rejected under 35 U.S.C. 112, first paragraph, as based on a disclosure which is not enabling. Omitting limitations critical or essential to the practice of the invention, but not included in the claim(s), is not enabled by the disclosure. See *In re Mayhew*, 527 F.2d 1229, 188 USPQ 356 (CCPA 1976). Applicant's Specification at page 9, line 11 and at page 11, paragraph 1 teaches that silane is a critical ingredient of the coating formulation. Hence, the claims would not appear to be enabled for a coating formulation that lacks silane, and so rejection is appropriate.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which

said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:
 1. Determining the scope and contents of the prior art.
 2. Ascertaining the differences between the prior art and the claims at issue.
 3. Resolving the level of ordinary skill in the pertinent art.
 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
9. Claims 72-91 are rejected under 35 U.S.C. 103(a) as being unpatentable over Guhde et al. USP 5,868,819. Guhde et al. teaches a method of coating a substrate that includes preparing an aqueous formulation comprised of water, zinc flake, and silane, applying it to a substrate surface, and heat treating the applied solution to obtain a corrosion resistant surface coating. Guhde suggests that the zinc flake may be zinc/aluminum alloy flake, wherein the aluminum content would not exceed 50 weight percent. See Guhde (Abstract; col. 2, line 23 through col. 5, line 23; col. 6, line 31 through col. 7, line 10; col. 8, line 35 through col. 9, line 59; col.14, line 45 through col. 16, line 10; and Claim 24). It would have been obvious to one of ordinary skill in the art at the time of the invention to fabricate the flake material of Guhde with a zinc/aluminum alloy, rather than zinc or zinc and aluminum separate flakes, as Guhde teaches that effective flakes may be comprised of zinc/aluminum alloys, wherein the amount of aluminum is less than 50 weight percent. Guhde may not exemplify the components of Claims 87-89, but does teach that effective compositions may

comprise these components. It would have been obvious to one of ordinary skill in the art at the time of the invention to fabricate the formulation of Guhde with these ingredients in the claimed amounts as Guhde teaches that effective formulations result when they are included.

Response to Amendment

- I. Applicant has submitted new claims directed to a method of coating a substrate. The relied upon prior art in the Office Action mailed on 26 April 2005, namely, Applicant's Admissions with respect to Eckart STAPA 4ZnAl7 and Eckart STAPA 4ZnSn30, does not teach or suggest these newly pending claims. Particularly, this prior art pertained to particular paste materials, which by themselves do not teach the claimed methods. With respect to Claims 72 and 85, there is no teaching or suggestion of forming liquid coating compositions that further comprise silane, further applying the composition at the claimed areal density, and then heat treating as claimed. With respect to Claim 80, there is no teaching or suggestion of forming a coating composition of the claimed amount of water and further heating treating as claimed. Hence, rejections over this prior art are not warranted.

- II. Applicant is advised that the presented claims have been renumbered, starting with Claim 72, as these are new claims and the previously highest numbered claim in the application was Claim 71.

Conclusion

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael La Villa whose telephone number is (571) 272-1539. The examiner can normally be reached on Monday through Friday.
11. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Deborah Jones can be reached on (571) 272-1535. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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12. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Michael La Villa
5 August 2005



MICHAEL E. LAVILLA PH.D.
PRIMARY EXAMINER